CLAIMS

What is claimed is:

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1. A method for processing a workflow for patient scheduling in a Hospital Information System, the method comprising:

sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician in the form of a decision tree of exams to be performed on the patient;

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ordering the requested exams, the order being placed by the scheduler with an acquisition modality, the acquisition modality being a system that can perform the ordered exams;

performing the ordered exams on the patient at the acquisition modality;

requesting additional exams to be performed on the patient based on an analysis

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of results of the ordered exams, the analysis being done by an analyst and the additional exams being requested by the analyst until an end of the decision tree is reached; and

sending results of all exams performed on the patient to the referring physician, the results being sent to the referring physician by the analyst.

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2. The method of claim 1, wherein the decision tree provided by the referring physician comprises:

additional exams to be performed on the patient based on results of exams performed on the patient;

exam specifications for all exams mentioned in the decision tree, the exam

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specifications for an exam specifying a manner in which the exam is to be performed; and

expected results for all exams mentioned in the decision tree.

3. The method of claim 2, wherein each exam in the decision tree can be a

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parent exam of zero or more child exams and can also be a child exam of one or more parent exams.

4. The method of step 1, wherein ordering the requested exams comprises:

scheduling the requested exams with the acquisition modality; and

informing the patient about the schedule of the scheduled exams.

5. The method of claim 1, wherein performing the ordered exams comprises:

performing the ordered exams on the patient in accordance with the exam specifications to obtain medical images of the ordered exams;

storing the medical images of the ordered exams in an image archive; and

sending the medical images of the ordered exams to the analyst for analysis.

6. The method of claim 5, wherein the image archive is a database of medical images of all exams performed on patients at the acquisition modality.

7. The method of claim 1, wherein requesting additional exams to be performed on the patient comprises:

analyzing the medical images to derive results of the ordered exams, the analysis of medical images being done by the analyst;

comparing the results of the ordered exams with the expected results of the ordered exams, the comparison of the results being performed by the analyst; and

requesting additional exams, as mentioned in the decision tree, to be performed on the patient based on the results of a parent exam, the request for the additional exams being sent by the analyst directly to the scheduler.

8. The method of claim 7, wherein additional exams comprise:

alternative exams to be performed on the patient in case the results of a parent exam performed on the patient do not match the expected results for the parent exam; and

supplementary exams to be performed on the patient in case the results of a parent exam match the expected results for the parent exam.

9. The method of claim 1, wherein an end of the decision tree is reached when a parent exam is reached that does not have any child exams which can be ordered by the analyst based on results of the parent exam, in the decision tree.

10. The method of claim 1, wherein the results of all exams are sent by the analyst to the referring physician, who reviews the results and completes the diagnosis of the patient.

11. A method for processing a workflow for patient scheduling in a Hospital Information System, the method comprising:

sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician in the form of a decision tree of exams to be performed on the patient, wherein the decision tree comprises:

additional exams to be performed on the patient based on results of exams which were performed on the patient;

exam specifications for all exams mentioned in the decision tree, the exam specifications for an exam specifying a manner in which the exam is to be performed; and

expected results for all exams mentioned in the decision tree;

ordering the requested exams, the order being placed by the scheduler with an acquisition modality, the acquisition modality being a system that can perform the ordered exams;

performing the ordered exams on the patient at the acquisition modality wherein performing the ordered exams comprises:

performing the ordered exams on the patient in accordance with the exam specifications to obtain medical images of the ordered exams;

storing the medical images of the ordered exams in an image archive; and

sending the medical images of the ordered exams to an analyst for analysis;

requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by the analyst and the additional exams being requested by the analyst till an end of the decision tree is reached wherein requesting additional exams comprises:

analyzing the medical images to derive results of the ordered exams, the analysis of medical images being done by the analyst;

comparing the results of the ordered exams with the expected results of the ordered exams, the comparison of the results being performed by the analyst; and

requesting additional exams, as mentioned in the decision tree, to be performed on the patient based on the results of the ordered exams, the request for the additional exams being sent by the analyst directly to the scheduler; and

preparing an examination report and sending it to the referring physician, the examination report containing a final analysis of the results of all exams performed on the patient.

12. The method of claim 11 wherein each exam in the decision tree can be a parent exam of zero or more child exams and can also be a child exam of one or more parent exams.

13. The method of claim 11 wherein an end of the decision tree is reached when a parent exam is reached that does not have any child exams, which can be ordered by the analyst based on results of the parent exam, in the decision tree.

14. A method for processing a workflow for patient scheduling in a Hospital Information System, the method comprising the steps of:

sending a request for ordering exams to be performed on a patient to a scheduler, the request being sent by a referring physician in the form of a decision tree of exams to be performed on the patient wherein the decision tree comprises:

additional exams to be performed on the patient based on results of exams, which were performed on the patient;

exam specifications for all exams mentioned in the decision tree, the exam specifications for an exam specifying a manner in which the exam is to be performed; and

expected results for all exams mentioned in the decision tree; and

ordering the requested exams, the order being placed by the scheduler with an acquisition modality, the acquisition modality being a system that can perform the ordered exams, wherein ordering the requested exams comprises:

scheduling the requested exams with the acquisition modality; and

informing the patient about the schedule of the scheduled exams;

performing the ordered exams on the patient at the acquisition modality wherein performing the ordered exams comprises:

performing the ordered exams on the patient in accordance with the exam specifications to obtain medical images of the ordered exams;

storing the medical images of the ordered exams in an image archive; and

sending the medical images of the ordered exams from the image archive to an analyst for analysis;

requesting additional exams to be performed on the patient based on an analysis of results of the ordered exams, the analysis being done by the analyst wherein requesting additional exams comprises:

analyzing the medical images to derive results of the ordered exams, the analysis of medical images being done by the analyst;

comparing the results of the ordered exams with the expected results of the ordered exams, the comparison of the results being performed by the analyst; and

requesting additional exams, as mentioned in the decision tree, to be performed on the patient based on the results of the ordered exams, the request for the additional exams being sent by the analyst directly to

the scheduler and the additional exams being requested by the analyst till an end of the decision tree is reached wherein the additional exams comprise:

alternative exams to be performed on the patient in case the results of an exam performed on the patient do not match the expected results for the exam; and

supplementary exams to be performed on the patient in case the results of an exam match the expected results; and

preparing an examination report and sending it to the referring physician, the examination report containing a final analysis of the results of all exams performed on the patient.

15.   The method of claim 14 wherein each exam in the decision tree can be a parent exam of zero or more child exams and can also be a child exam of one or more parent exams.

16.   The method of claim 14 wherein an end of the decision tree is reached when a parent exam is reached that does not have any child exams, which can be ordered by the analyst based on results of the parent exam, in the decision tree.

17.   A method for scheduling patient exams comprising:

generating a hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams;

scheduling resources and patients for exams in accordance with the listing, the scheduling continuing without final reporting until all exams in a family of exams have been performed in accordance with the listing; and

reporting results of the exams upon completion of a final exam in a family of exams.

18.   The method of claim 17, wherein the hierarchical listing comprises a decision tree having a plurality of nodes corresponding to exams.

19. The method of claim 17, wherein the hierarchical listing includes recommendations for how exams are to be performed.

20. The method of claim 17, wherein each exam may follow one or more exams in a family.

21. The method of claim 17, wherein each exam may be followed by one or more exams in a family.

22. The method of claim 17, wherein the resources include at least two different examination modalities.

23. The method of claim 22, wherein at least one of the modalities is an imaging modality.

24. A system for scheduling patient exams comprising:

means for generating a hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams;

means for scheduling resources and patients for exams in accordance with the listing, the scheduling continuing without final reporting until all exams in a family of exams have been performed in accordance with the listing; and

means for reporting results of the exams upon completion of a final exam in a family of exams.

25. A computer program for scheduling patient exams comprising:

at least one computer readable medium; and

computer readable code on the at least one computer readable medium including routined for generating a hierarchical listing of exams to be performed in desired sequences, including exams desired before and after other exams based upon results of the exams, scheduling resources and patients for exams in accordance with the listing,

the scheduling continuing without final reporting until all exams in a family of exams have been performed in accordance with the listing, and reporting results of the exams upon completion of a final exam in a family of exams.